

CLAIMS:

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent is:

Sub A1 1. A system for generating an advertisement optimized for one or more persons located at a public location, said system

comprising:

means for obtaining data relating to one or more persons at a public location during a period of time;

processing means for receiving said obtained data, collecting data relating to said one or more persons based on said received data, and extracting common elements from said collected data;

means for generating an advertisement related to products or services, said advertisement optimized according to said common elements for said one or more persons at said location; and,

means communicable with said processing means for transmitting said optimized advertisement to a communication device located at said public location for communicating said optimized advertisement to said one or more persons.

2. The system as claimed in Claim 1, further including database memory including data relating to: said one or more said persons in said group, said persons data including identity data, data relating to a plurality of products and services, and advertisement data relating to various ones or categories of said

6 products or services, said processing means collecting data by
7 querying said database memory for identifying one or more persons
8 at said location.

1 3. The system as claimed in Claim 2, wherein said one or more
2 persons at said location perform a product purchasing
3 transaction, said obtained data including products/services and
4 corresponding process as chosen by said one or more persons, said
5 collected data including data relating to common products being
6 purchased at the location.

1 4. The system as claimed in Claim 3, wherein said collected data
2 includes a history of prior products and service purchase
3 transactions completed by said one or more persons identified in
4 said group.

1 5. The system as claimed in Claim 2, wherein said means for
2 obtaining data relating to one or more persons includes means for
3 obtaining data relating to physical characteristics of said one
4 or more persons, said collected data including data relating to
5 common physical characteristics of persons at said location.

1 6. The system as claimed in Claim 5, wherein said means for
2 obtaining data relating to physical characteristics includes
3 means for obtaining biometric data of said one or more persons.

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7. The system as claimed in Claim 2, wherein said means for
obtaining data relating to one or more persons includes means for
obtaining data relating to behavioral characteristics of said one
or more persons, said collected data including data relating to a
common activity performed by one or more persons at said
location.

8. The system according to claim 4, wherein said processing means
further comprising means for classifying obtained data according
to predetermined criteria and generating classification data,
said classifying means classifying data according to one or more
criteria selected from the group comprising: a person's age,
gender, area of residence, citizenship, physical characteristics,
type of products involved in a current transaction, and prices of
products involved in a current transaction.

9. The system according to Claim 8, further including means for
relating current obtained data of an identified person to
categories of products and services obtained from prior purchase
transactions for said identified person and generating relation
data, said system including means for updating data relating to
said persons in said database memory with said classification
data and said relation data.

10. The system according to claim 8, wherein said means for
generating an advertisement includes means for selecting an

3 optimized advertisement from said advertisements contained in
4 said database memory.

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11. The system according to Claim 10, wherein said processing
2 means further includes:
3 means for associating products/services with said common
4 personal characteristics; and,
5 means for ranking suitable products/services for advertisement
6 according to said common personal characteristics, said selecting
7 means selecting an optimized advertisement according to said
8 ranking.

12. The system according to Claim 10, wherein said selecting
2 means further including means for further initiating creation of
3 a new advertisement through use of said products/services data
4 when an optimized advertisement selection is not available.

13. The system according to Claim 1, wherein said means for
2 obtaining data further includes input/output devices and a
3 network interface for communicating said optimized advertisement
4 over a network to said communication device.

14. The system according to Claim 11, wherein said network
2 includes the Internet.

15. The system according to Claim 1, wherein said communication
2 device includes one of: a television monitor, a digital display

3 device, a loud speaker device, an electronic billboard device, a
4 printed sales receipt.

Pub AB 16. A method for generating an advertisement optimized for one
2 or more persons located at a public location, said method
3 comprising the steps of:

4 a) obtaining data relating to one or more persons at a
5 public location during a period of time;

6 b) collecting data relating to said one or more persons
7 based on said obtained data;

8 c) extracting common elements from said collected data and
9 associating products and services for advertisement with said
10 common elements;

11 d) generating an advertisement related to products or
12 services, said advertisement optimized according to said common
13 elements for said one or more persons at said location; and,

14 e) transmitting said optimized advertisement to a
15 communication device located at said public location for
16 communicating said optimized advertisement to said one or more
17 persons.

1 17. The method as claimed in Claim 16, further including the
2 step of: storing data in a database memory, said data relating
3 to: said one or more said persons in said group, said persons
4 data including identity data, data relating to a plurality of

5 products and services, and advertisement data relating to various
6 ones or categories of said products or services, said collecting
7 data step b) including the step of querying said database memory
8 for identifying one or more persons at said location.

1 18. The method as claimed in Claim 17, wherein said one or more
2 persons at said location perform a product purchasing
3 transaction, said obtained data relating to products/services and
4 corresponding process as chosen by said one or more persons,
5 wherein said collected data includes data relating to common
6 products being purchased at the location.

1 19. The method as claimed in Claim 18, wherein said collected
2 data for each said one or more persons includes a history of
3 prior products and service purchase transactions completed by
4 said one or more persons identified in said group.

1 20. The method as claimed in Claim 17, wherein said step of
2 obtaining data relating to one or more persons further includes
3 obtaining data relating to physical characteristics of said one
4 or more persons, said method further including associating
5 products and services for advertisement with said common physical
6 characteristics of persons at said location.

21. The method as claimed in Claim 20, wherein said step of
obtaining data includes obtaining biometric information data of
said one or more persons.

22. The method as claimed in Claim 17, wherein said step of
obtaining data further includes obtaining data relating to
behavioral characteristics of said one or more persons, said
method further including associating products and services for
advertisement with a common activity performed by one or more
persons at said location.

23. The method according to claim 19, wherein said collecting
step further includes the steps of classifying obtained data
according to predetermined criteria and generating classification
data, said predetermined criteria selected from the group
comprising: a person's age, gender, area of residence,
citizenship, physical characteristics, type of products involved
in a current transaction, and prices of products involved in a
current transaction.

24. The method according to Claim 23, further including the
steps of:

relating current obtained data of an identified person to
categories of products and services obtained from prior purchase

5 transactions for said identified person and generating relation
6 data; and,

7 updating data relating to said persons in said database
8 memory with said classification data and said relation data.

1 25. The method according to claim 23, wherein said generating
2 step d) further includes the step of selecting an optimized
3 advertisement from said advertisements contained in said database
4 memory.

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26. The method according to Claim 25, further including the step
of ranking suitable products/services for advertisement according
to said common personal characteristics, said selecting step
selecting an optimized advertisement according to said ranking.

27. The method according to Claim 25, wherein said selecting
step further includes the step of initiating creation of a new
advertisement through use of said products/services data when an
optimized advertisement selection is not available.

1 28. The method according to Claim 16, wherein said optimized
2 advertisement is transmitted to a communication device via a
3 network.

29. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for generating an advertisement optimized for one or more persons located at a public location, the method steps comprising:

a) obtaining data relating to one or more persons at a public location during a period of time;

b) collecting data relating to said one or more persons based on said obtained data;

c) extracting common elements from said collected data and associating products and services for advertisement with said common elements;

d) generating an advertisement related to products or services, said advertisement optimized according to said common elements for said one or more persons at said location; and,

e) transmitting said optimized advertisement to a communication device located at said public location for communicating said optimized advertisement to said one or more persons.

30. The program storage device as claimed in Claim 29, wherein the method steps further includes the step of: storing data in a database memory, said data relating to: said one or more said persons in said group, said persons data including identity data, data relating to a plurality of products and services, and

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7 advertisement data relating to various ones or categories of said
8 products or services, said collecting data step b) including the
9 step of querying said database memory for identifying one or more
persons at said location.

1 31. The program storage device as claimed in Claim 30, wherein
2 said one or more persons at said location perform a product
3 purchasing transaction, said obtained data relating to
4 products/services and corresponding process as chosen by said one
5 or more persons, wherein said collected data includes data
6 relating to common products being purchased at the location.

1 32. The program storage device as claimed in Claim 31, wherein
2 said data collected for each said one or more persons includes a
3 history of prior products and service purchase transactions
4 completed by said one or more persons identified in said group.

1 33. The program storage device as claimed in Claim 30, wherein
2 said step of obtaining data relating to one or more persons
3 further includes obtaining data relating to physical
4 characteristics of said one or more persons, said program storage
5 device further including associating products and services for
6 advertisement with said common physical characteristics of
7 persons at said location.

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1 34. The program storage device as claimed in Claim 33, wherein
2 said step of obtaining data includes obtaining biometric
3 information data of said one or more persons.

1 35. The program storage device as claimed in Claim 30, wherein
2 said step of obtaining data further includes obtaining data
3 relating to behavioral characteristics of said one or more
4 persons, said program storage device further including
5 associating products and services for advertisement with a common
6 activity performed by one or more persons at said location.

1 36. The program storage device according to claim 32, wherein
2 said collecting step further includes the steps of classifying
3 obtained data according to predetermined criteria and generating
4 classification data, said predetermined criteria selected from
5 the group comprising: a person's age, gender, area of residence,
6 citizenship, physical characteristics, type of products involved
7 in a current transaction, and prices of products involved in a
8 current transaction.

1 37. The program storage device according to Claim 36, wherein
2 said method steps further includes the steps of:
3 relating current obtained data of an identified person to
4 categories of products and services obtained from prior purchase

5 transactions for said identified person and generating relation
6 data; and,

7 updating data relating to said persons in said database
8 memory with said classification data and said relation data.

1 38. The program storage device according to Claim 36, wherein
2 said generating step d) further includes the step of selecting an
3 optimized advertisement from said advertisements contained in
4 said database memory.

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1 ~~39. The program storage device according to Claim 38, wherein~~
2 ~~said method steps further includes the step of ranking suitable~~
3 ~~products/services for advertisement according to said common~~
4 ~~personal characteristics, said selecting step selecting an~~
5 ~~optimized advertisement according to said ranking.~~

1 40. The program storage device according to Claim 38, wherein
2 said selecting step further includes the step of initiating
3 creation of a new advertisement through use of said
4 products/services data when an optimized advertisement selection
5 is not available.

1 41. The program storage device according to Claim 29, wherein
2 said optimized advertisement is transmitted to a communication
device via a network.